LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A communication device comprising:

a signal modifier that modifies an input signal to reduce peak values associated with the input signal and provides a peak reduced input signal, the signal modifier comprising a signal shaper that shapes a modulation constellation of the input signal to reduce the peak values associated with the input signal; and

a power amplifier that amplifies the peak reduced input signal and an instruction signal associated with modifications of the input signal by the signal modifier, the instruction signal being employed by a receiver to reconstruct the input signal to its original form prior to modification and being transmitted in a parallel relationship with the peak reduced input signal, such that the instruction signal and the peak reduced signal are transmitted from the communication device concurrently and are received at the receiver concurrently.

2-3. (Cancelled)

4. (Original) The communication device of claim 1, the instruction signal being an instruction code that is modulated into the peak reduced input signal.

5. (Previously Presented) The communication device of claim 1, the input signal conforming to one of Wideband Code Division Multiple Access (WCDMA), Orthogonal Frequency Division Multiplexing (OFDM), Global Standard for Mobile Communication (GSM), Code Division Multiple Access (CDMA 2000) and Time Division Multiple Access (TDMA).

6. (Original) The communication device of claim 1, further comprising a digital-to-analog converter (DAC) that converts the peak reduced input signal and the instruction signal from the

digital domain to the analog domain directly to radio transmission frequencies, and provides an analog peak reduced input signal and an analog instruction signal to the power amplifier for amplification.

7-11. (Cancelled)

12. (Currently Amended) A communication device comprising:

a signal splitter that decomposes an input signal into a plurality of replica signals, each of the plurality of replica signals being substantial replicas of the input signal scaled in amplitude and having a sum that is approximately equal to the input signal, such that each of the plurality of replica signals has a maximum peak value below the maximum peak value of the input signal;

a signal combiner that sequentially orders the plurality of replica signals for transmission; and

a power amplifier that amplifies the sequentially ordered plurality of replica signals to provide a transmission signal.

13. (Currently Amended) The transmitter of claim 12, the signal combiner combines an instruction signal with the plurality of replica signals, the instruction signal informs a receiver of at least one of the number of replica signals and an amplitude scaling associated with the replica signals.

14. (Previously Presented) A communication system comprising:

means for modifying an input signal to provide a modified input signal having reduced peak values;

means for generating an instruction signal associated with reconstructing the input signal to its original form prior to modification;

means for transmitting a transmission signal that includes the modified input signal and the instruction signal transmitted in a parallel relationship, such that the instruction signal is transmitted concurrently with the modified input signal;

means for receiving the transmission signal; and

means for reconstructing the input signal to its original form from the modified input signal prior to modification employing the instruction signal that was transmitted in the parallel relationship with the modified input signal.

15. (Original) The system of claim 14, further comprising means for combining the modified input signal and the instruction signal into the transmission signal.

16. (Currently Amended) The system of claim 14, the means for modifying comprising means for decomposing the input signal into a plurality of replica signals[[,]] that are each substantial replicas of the input signal scaled in amplitude and having a sum that is approximately equal to the input signal, such that each of the plurality of replica signals has, ~~each having~~ a maximum peak value below the maximum peak value of the input signal, and means for sequentially ordering the plurality of replica signals into a transmission signal.

17. (Previously Presented) A method of transmitting a signal in a communication system comprising:

modifying an input signal to reduce peak values associated with the input signal;

generating an instruction signal associated with information relating to the peak reduction of the input signal;

combining the modified input signal and the instruction signal into a transmission signal in a sequential relationship, such that the instruction signal is transmitted prior to the modified input signal;

converting the transmission signal from the digital domain to the analog domain;

amplifying the transmission signal; and

transmitting the transmission signal.

18. (Cancelled)

19. (Previously Presented) The method of claim 17, further comprising separating the modified input signal from the instruction signal and reconstructing the modified input signal to its original form prior to peak reduction based on information associated with the instruction signal or code.

20. (Currently Amended) A method of transmitting a signal in a communication system comprising:

modifying an input signal into a plurality of replica signals, each of the plurality of replica signals being substantial replicas of the input signal scaled in amplitude and having a sum that is approximately equal to the input signal, such that each of the plurality of replica signals has a peak value below the maximum peak value of the input signal;

sequentially ordering the plurality of replica signals into a transmission signal;

converting the transmission signal from the digital domain to the analog domain;

amplifying the transmission signal; and

transmitting the transmission signal.

21. (Previously Presented) The method of claim 20, further comprising reconstructing the plurality of replica signals into the input signal in its original form prior to modification.

22. (Previously Presented) A communication system comprising:

a first communication device comprising:

a signal modifier configured to receive an input signal and to modify the input signal to reduce peak values associated with the input signal; and

a transmitter configured to transmit the modified input signal;

the communication system also comprising:

a second communication device comprising:

a receiver configured to receive the transmitted modified input signal; and

a reconstructor configured to reconstruct the modified input signal to its original form prior to modification employing modification information associated with the modifications of the input signal, the modification information residing at the second communication device prior to the receiver receiving the transmitted modified input signal.

23. (Currently Amended) The communication system of claim 22, wherein the modification information comprises [[a]] an amplitude scale factor associated with reducing peak values.

24. (Currently Amended) The communication device of claim 1, wherein the modifications of the input signal comprise scaling an amplitude of the input signal to reduce the peak values associated with the input signal.

25-26. (Cancelled)

27. (New) The communication device of claim 1, wherein the instruction signal is configured as an orthogonal code that is combined with the peak reduced input signal prior to transmission from the communication device.

28. (New) The communication device of claim 1, wherein the instruction signal occupies a first frequency band and the peak reduced input signal occupies at least one additional frequency band upon concurrent transmission from the communication device.

29. (New) The communication device of claim 4, wherein the instruction signal and the peak reduced input signal are modulated in a time-division multiple access (TDMA) manner prior to transmission.

30. (New) The communication device of claim 12, wherein a known instruction code associated with reconstructing the input signal to its original form prior to modification resides at a receiver that receives the plurality of replica signals, such that the receiver is configured to reconstruct the input signal to its original form prior to modification based on the known instruction code.

31. (New) The communication device of claim 13, wherein the instruction signal is configured as an orthogonal code that is combined with the sequentially ordered plurality of replica signals prior to transmission from the communication device.

32. (New) The communication device of claim 13, wherein the sequentially ordered plurality of replica signals occupies a first frequency band and the instruction signal occupies at least one additional frequency band, the instruction signal and the sequentially ordered plurality of replica signals being transmitted substantially concurrently from the communication device.

33. (New) The communication device of claim 13, wherein the instruction signal and the sequentially ordered plurality of replica signals are modulated in a time-division multiple access (TDMA) manner prior to transmission.

34. (New) The communication device of claim 15, wherein the means for combining comprises means for modulating the instruction signal as an orthogonal code into the modified input signal prior to transmission from the communication device.

35. (New) The communication device of claim 14, wherein the means for transmitting is configured to transmit the modified input signal at a first frequency band and to transmit the

instruction signal at at least one additional frequency band substantially concurrently from the communication device.

36. (New) The communication device of claim 15, wherein the means for combining comprises means for modulating the instruction signal into the modified input signal in a time-division multiple access (TDMA) manner prior to transmission.

37. (New) The method of claim 21, further comprising modulating an instruction signal as an orthogonal code into the transmission signal prior to transmission, the instruction signal being employed by a receiver to reconstruct the input signal in its original form prior to modification.

38. (New) The method of claim 21, further comprising transmitting the transmission signal at a first frequency band and transmitting an instruction signal at at least one additional frequency band substantially concurrently, the instruction signal being employed by a receiver to reconstruct the input signal in its original form prior to modification.

39. (New) The method of claim 21, further comprising modulating an instruction signal into the transmission signal in a time-division multiple access (TDMA) manner prior to transmission, the instruction signal being employed by a receiver to reconstruct the input signal in its original form prior to modification.

40. (New) The method of claim 21, wherein reconstructing the plurality of replica signals into the input signal comprises reconstructing the plurality of replica signals into the input signal in its original form prior to modification based on a known instruction code associated with reconstructing the input signal to its original form that resides at a receiver that receives the plurality of replica signals.